



David G. Watson

## David G. Watson Made Foreman In Utilities

David G. Watson has been promoted to a foreman in Utilities Administration. The appointment is effective tomorrow, February 1. Watson, a native of Speedwell, has been in Y-12 since August 5, 1953. (He worked an earlier stint here with Tennessee Eastman.) A veteran of the U. S. Army, he had worked with the New York Central Railroad and the River Raisen Paper Company, in Monroe, Michigan.

Prior to coming to Y-12 the second time he worked with the Atomic Energy Commission.

The Watsons live at 365 Jefferson Avenue, Oak Ridge. Mrs. Watson is the former Juanita McNelley. They have a married daughter, Etta Giles, Oliver Springs; and a son Gerald at home.

## ASTME Meet Set For Deane Hill Thursday

The Knoxville-Oak Ridge Chapter 107 of the American Society of Tool and Manufacturing Engineers will hold a dinner meeting at Deane Hill Country Club tomorrow, February 1st, at 7:00 p.m. Society business for the evening will include the election of officers and the announcement of a materials course.

"Biological Use of the Zonal Ultracentrifuge" will be the subject of the guest speaker C. E. Nunley. Nunley, of Separation Systems Division, ORGDP, is well known for his accomplishments in the Zonal Liquid Centrifuge development. The liquid centrifuge offers researchers a modern tool for the study of virus and cellular components and for the production of vaccines for use against communicable diseases.

The ASTME will conduct a Manufacturer's Practice Refresher Series consisting of six succeeding Wednesday night meetings; tentative starting date is March 13. Subject matter for this course will be Mechanical Behavior of Engineering Materials. The course will be given at the ORAU Training Building, Oak Ridge, and a certificate of completion will be awarded those attending all six meetings.

ASTME's founding purpose is "to advance scientific knowledge in the field of tool and manufacturing engineering and to apply its resources to research, writing, publishing, and disseminating information."

## Princeton's Grove Guest At Theronuclear Meet

Dr. D. J. Grove, Plasma Physics Laboratory, Princeton University, will speak on "Recent Experiments on the C-Stellarator" at this week's Theronuclear Division seminar.

The seminar is set for tomorrow, Thursday, February 1, at 9 a.m. in the TD Conference Room, Building 9201-2.

## Last Fling

Last Fling.

Last Fling Before.

Last Fling Before Spring.

Technical Services says save March 9 for their big Last Fling Before Spring . . . their party, set at the Holiday Inn. Details later.

## IEEE To Discuss Numerical Control

"Numerical Control — State of the Art" is the title of a talk which will be given by William H. Sorenson at the monthly meeting of the Institute of Electrical and Electronic Engineers. The meeting is set for next Thursday, February 8, at 7:30 p.m. in the Green Room of the Ridge Recreation Hall.

With the aid of slides, the speaker will cover the history of numerical controls, particularly as used in the machine tool industry, up to the transition to integrated circuits. He will also comment on the next direction industry will take.

Sorenson is sales manager of the Chicago office of the Industrial Controls Division of the Bendix Corporation, and has visited Oak Ridge several times. He is a mechanical engineer with extensive experience in machine tool design.

Refreshments will be served after the meeting. The public is cordially invited to next week's meeting.

## Upset Driver Is Usually Poor Driver

The upset driver is usually a poor driver. It's a good idea to stay out from behind the wheel of your car when you are mad, emotionally upset or engrossed in deep thought. Driving a car these days requires your full attention and a calm disposition. A drive should not be used to clear up your thinking or cool off your temper. If you have to drive recognize the danger represented by your condition and concentrate on driving safely with toleration and courtesy toward others.

## IN CASE OF RAIN

Let a smile be your umbrella . . . but in case of rain, you'd better take the real McCoy along!

## Oak Ridge AEC Facilities End Best Safety Year -- 1967

Employees at the Atomic Energy Commission's Oak Ridge Operations had their safest year on record during 1967, according to AEC figures.

"This was our finest year in terms of safety," according to S. R. Sapirie, manager, Oak Ridge Operations. "We have had no industrial fatalities within Oak Ridge Operations for the third successive year," he added. For the past 21 years, Oak Ridge has also not had a single fatality from radiation exposure.

Sapirie attributed the new record to management and employee emphasis on safety and the use of equipment and machines designed to protect employees.

Year-end figures for lost time accidents, motor vehicle accidents, property damage and fire losses were all down from those reported in 1966, which was also a record year.

During 1967, only 37 lost time accidents were reported from a work force of more than 20,000 people, an improvement over the 45 lost time accidents reported in 1966. (As pointed out previously, Y-12 suffered six lost time accidents in 1967.)

The cost of property damage fell to \$16,500 in 1967 from a figure of \$349,000 in 1966. Fire loss was also held to a record low of \$5,400 last year, nearly half the amount lost in 1966. These loss records are extremely small, when compared to the actual value for all facilities at Oak Ridge Operations of more than \$3 billion.

Sapirie said that credit for the low fire loss during the past year is due to increased emphasis on organized fire brigades and the

extensive automatic sprinkler systems installed in each plant.

Under Oak Ridge Operations, the General Electric Company, AEC's contractor for the Nuclear Materials and Propulsion Operations at Evendale, Ohio, has not recorded a lost time injury since 1961, or 2,435 consecutive days without a disabling injury.

The overall frequency rate of accidents — the national yardstick for industrial safety — dropped for Oak Ridge operations during the year to .99 injuries per million man hours worked from a rate of 1.22 the previous year. (Y-12's frequency rate, for the sixth consecutive year was below one . . . 0.56 for 1967!) The average injury frequency rate for all industries reporting to the National Safety Council during 1966 was 6.91.

## Stress Analysis Society To Form

On organizational meeting of the East Tennessee Section of the Society for Experimental Stress Analysis is set next week. It will be held at the University of Tennessee Center, at 6 p.m., next Thursday, February 8.

The social hour begins at 6 p.m., dinner at 6:30 and the meeting is set for 7:30 p.m.

Clarence R. Smith, design specialist with the Convair Division of General Dynamics, San Diego, will speak. His subject will be the Role of Experimental Stress in Solving Fatigue Problems. Down-to-earth principles, taken from 26 years of experience with aircraft structures, will be discussed. Principles of good and poor design will be illustrated by photoelastic models and punctuated by photographs and cartoons from the lecturer's book, "Tips on Fatigue," printed by the Government Printing Office. Removal of material where not needed will be emphasized.

Cost of the meal is \$3.75, and reservations may be made in Knoxville through Dr. H. Pih, Department of Engineering Mechanics, at UT, telephone 974-2255 . . . or Jack Smith, ORNL, extension 3-5607.

Reservations are not required for those attending the lecture only.

Additional information may be obtained from Charles Knight, extension 3-5407.

## WISDOM OF AGE

The best substitute for wisdom or experience is to be 17 years old.

## SAFETY SCOREBOARD

The Y-12 Plant Has  
Operated  
32 Days Or  
875,000 Man-Hours  
(Unofficial Estimate)  
Through January 28  
Without a Disabling  
Injury  
Safety At Home  
At Work, At Play



AN 'IMPROVED WHEEL-TYPE ELECTRODE FOR WELDING BERYLLIUM METAL' has been developed by C. L. Estes, Metallurgical Development. The U.S. Atomic Energy Commission has filed a patent application on Estes' development, and he receives notice above from P. L. Vanstrum, technical director. Paul Turner looks on from left.



# The Bulletin

Published Weekly For The  
Y-12 Employees Of  
UNION CARBIDE  
CORPORATION



NUCLEAR DIVISION

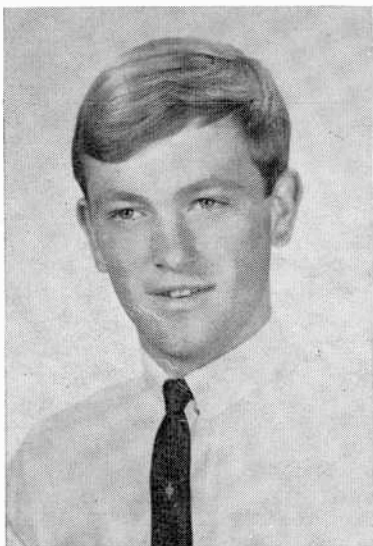
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## Y-12er's Son Is Cited By DECA



David Watson

David Watson, son of D. G. Watson, Utilities, was recently selected as DECA student of the month at Oak Ridge School (DECA . . . Distributive Education Clubs of America, a co-operative type schooling where the student works parttime).

A senior at Oak Ridge High School, David was also named Outstanding Student by the Optimist Club for his DE training. This is his second year with job training since he was with Co-op last year. He is president of the local DECA Club, and is employed at the local A & P Grocery, Downtown.

David's duties at work are that of stocking the Dairy Department, and managing the floor care unit. When asked to comment on the DE program and how it applied to his job, David replied, "I feel that DE gives a guy a chance to discover himself, his abilities, and to get set for a career. I feel that the class work gives a better understanding of your job, and of the responsibilities tied-in with it."

"I consider it a great honor to know that the students have that kind of faith in me, and I am very glad to represent DECA and what it stands for."

David plans a career in business, and hopes to attend the University of Tennessee next year.

The Watson home is at 365 Jefferson Avenue, Oak Ridge.

### OPINION TAKER

The man to a poll taker: "That's my honest opinion. I can give you my wife's even though she's not in. It would be just the opposite of mine."

### IT BEGAN THERE

The custom of tipping originated in England when small sums were dropped into a box marked T.I.P.S. The initials meant "to insure prompt service."



Tomorrow, the 'littlest' month of all with the big birthdays is ushered in. Friday marks Groundhog Day in Tennessee. The entire week marks anniversary time for several Y-12ers marking important landmarks with Union Carbide Corporation. Congratulations.

#### 20 YEARS

**James R. Helton**, Area Five Maintenance, February 2.

**Walter N. Reed**, Electrical Department, February 2.

#### 15 YEARS

**A. D. Justus**, General Weld Shop, February 3.

**George W. McGown**, Product Engineering, February 3.

**Robert P. Davis**, Timekeeping Department, February 4.

**Guy D. Garrett**, Area Five Maintenance, February 4.

**John A. McKenzie**, Environmental Control Engineering, February 4.

**Rolf C. Rosenvinge**, Civil and Architectural Engineering, February 6.

#### 10 YEARS

**Alan M. Christman**, Data Processing, February 4.

## Vadim Film Offered Sunday In AAUW Series

"Les Liaisons Dangereuses," dramatic French film with English subtitles, will be shown twice Sunday, February 4, at 7 and 9 p.m. in Jefferson Junior High Auditorium. The movie is part of the Foreign Film Series sponsored by AAUW in Oak Ridge this fall and winter.

This film version of a scandalous novel was directed by Roger Vadim and stars Jeanne Moreau, Gerard Philipe, Jeanne Valerie. Moreau and Philipe play a happily married couple which makes a hobby of seduction, each with the other's consent and often with the other's assistance in planning. In this film, Vadim presents a serious but witty condemnation of immorality.

Single admission tickets at 75 cents each will be available at the door before the start of each performance.

### GET HELP IN LIFTING

If you handle materials, you need to know how to lift (crouch and bend the legs, keep back straight) and to use common sense in moving heavy or awkward loads. Get help when necessary.



**MELISSA MAJORS** is the one-year-old daughter of Carol and Larry Majors (Carol is a former nurse on C Shift). The proud grandfather is R. H. Clary, Process Maintenance. How about that smile?

# McFarland, Parsons, Pigott, Underwood, Williams And Zehner Take Early Reritements

Six well-known old-timer Y-12ers take early retirement tomorrow, February 1. C. C. Parsons, Buildings, Grounds and Maintenance Shops; C. L. Pigott, SS Control; E. P. McFarland, Process Maintenance; E. C. Underwood, also of Process Maintenance; and J. T. Williams and D. V. Zehner, Buildings, Grounds and Maintenance Shops, have all elected to retire early.

Clarence C. Parson, a native of Nashville, has been here since October 23, '44. His early youth saw him begin carpentry and millwright work with the A. S. Parson and Son company and the Virginia-Carolina Chemical Company, at Mt. Pleasant, Tennessee.

He later went with Hardaway-Creighton, Foster-Creighton, at Tullahoma and Paris, Tennessee . . . then later Foster-Creighton-Oman, here in Oak Ridge. He also worked with Stone and Webster before coming to Y-12.

The Parsons live at 110 Robin Lane. Mrs. Parson is the former Flois Finerty and they have three sons and three daughters . . . Clarence S., Miami; James A., in Oak Ridge; and Bobby in Miami Springs. Their daughters Betty Hawkins, Priscilla Delaney and Angela Carroll all live in Oak Ridge. There are 15 grandchildren in the Parson clan.

The retiring Y-12er plans to maintain his Oak Ridge home, but hopes to spend a lot of time in Florida.

Edgar C. Underwood leaves after more than 17 years in Y-12. He came here October 10, 1950.

Born in Wehutt, North Carolina, Underwood attended King College at Bristol. He left to work with a mining and engineering company at Birmingham. He later went with the Aluminum Company of America at Alcoa, and then later with the Tennessee Valley Authority on various dams. Other jobs took him to New York, Augusta, Georgia, and Hot Springs, Arkansas before coming to Oak Ridge.

Mrs. Underwood is the former Louise Pittman, Knoxville, and is a teacher in the County school system. They have four children, 12 grandchildren and one great-grandchild. The Underwoods live at Route 2, Concord.

Underwood says he will miss his many friends in Y-12, but is looking forward to spending his retirement on his farm and enjoying some leisure there.

J. T. Williams, a painter, is a native of Lenoir City. He has had only two jobs in his entire life . . . here for 24 years . . . he came February 1, 1944 . . . and with the Bacon Hosiery Mill, Lenoir City, for 22 years.

His wife is the former Leota J. Peterson, and they have two sons . . . Mayford, Greeneville; and Kenneth, Nashville. They have a granddaughter in Greeneville, Beverly; and two grandsons in Nashville, David and Douglas.

Williams has no definite retirement plans other than taking it easy at his Route 5, Lenoir City, home.

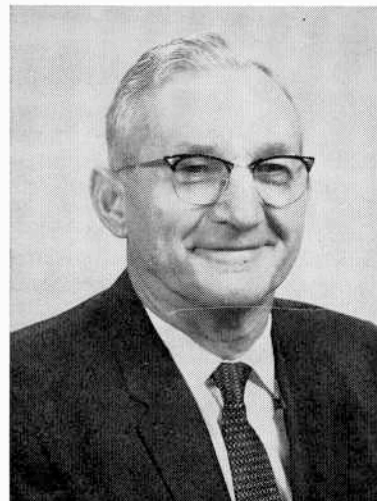
And finally, Daniel V. Zehner, another well-known Y-12er, retires after nearly 25 years service here.

Dan is a native of Albany, Indiana, and lives at 5706 Ridgefield Road, Norwood area, Knoxville.

Before coming to Y-12, the retiring Zehner worked on a farm in Alabama, with the Gulf Refining Company, New Orleans; and with the Tennessee Valley Authority.

Mrs. Zehner is the former Cecile Miller.

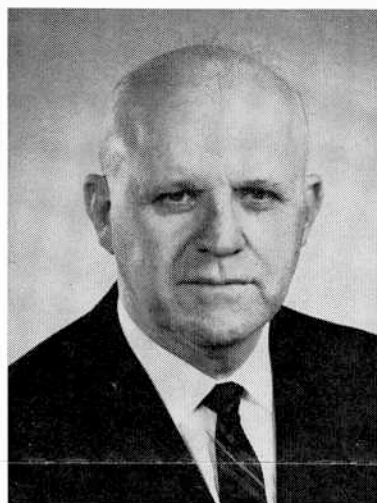
Zehner has two sons: Carl D., a Y-12er; and Alfred, Fort Worth, Texas. He also has a stepson Charles W. Catalett, who also works in Y-12; and a stepdaugh-



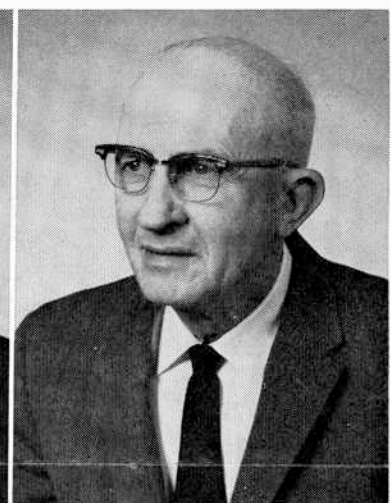
Clarence C. Parsons



Edgar C. Underwood



Daniel V. Zehner



J. T. Williams

ter Mrs. Geraldine C. Kirby, Knoxville.

Dan plans to take it easy. They own a lot on Watts Bar Lake, and are considering building a weekend cottage there for the summer months.

Y-12 extends its best wishes to all six of its January retirees.

C. L. Pigott and E. P. McFarland's biographies will be carried in next week's Bulletin.

## Wilderness Group Meets Tomorrow

Tennessee Citizens for Wilderness Planning will hold a public meeting tomorrow, Thursday, February 1, at 8 p.m. at the First Presbyterian Church Fellowship Hall in Oak Ridge.

Mack S. Prichard, state park naturalist, will speak on the need for state legislation in conservation. Included will be: improvements in the strip mine law, pollution control, initiation of a Tennessee hike-bike trail system and wilderness preservation.

Robert A. Miller, president of the Tennessee Scenic Rivers Association will present some statistics to support the desirability of a Tennessee Scenic Rivers System.

State Representatives William Pole, Pikeville; and A. Kidwell and Forest Bridges of Oak Ridge have been asked to attend to give their views and to answer questions from the public. Senator Ray Baird of Rockwood has also been invited.

The legislature will reconvene in mid-February. This may be the only opportunity citizens will have to express their feelings for the need of these important legislative measures if any action is expected this year.



**Ride wanted from 2728 East Fifth Avenue, Knoxville, to West Portal, straight day.** Fay Webster, plant phone 3-7277, home phone Knoxville 525-7562.

**Ride wanted three afternoons per week (Monday, Wednesday, Friday) from North Portal, to Karns via Oak Ridge Highway.** Carol Coker, plant phone 3-5049, home phone Knoxville 947-1973.

**Car pool members wanted from West Knoxville, to Central Portal, straight day.** Frances Young, plant phone 3-7223, home phone Knoxville 588-9779.

**Will join car pool from East Drive, Oak Ridge, to North Portal, straight day.** Walter Corbett, plant phone 3-5866.

**Ride wanted from 678 West Outer Drive, Oak Ridge, to North Portal, straight day.** Ettajean Smith, plant phone 3-7147, home phone Oak Ridge 483-6746.

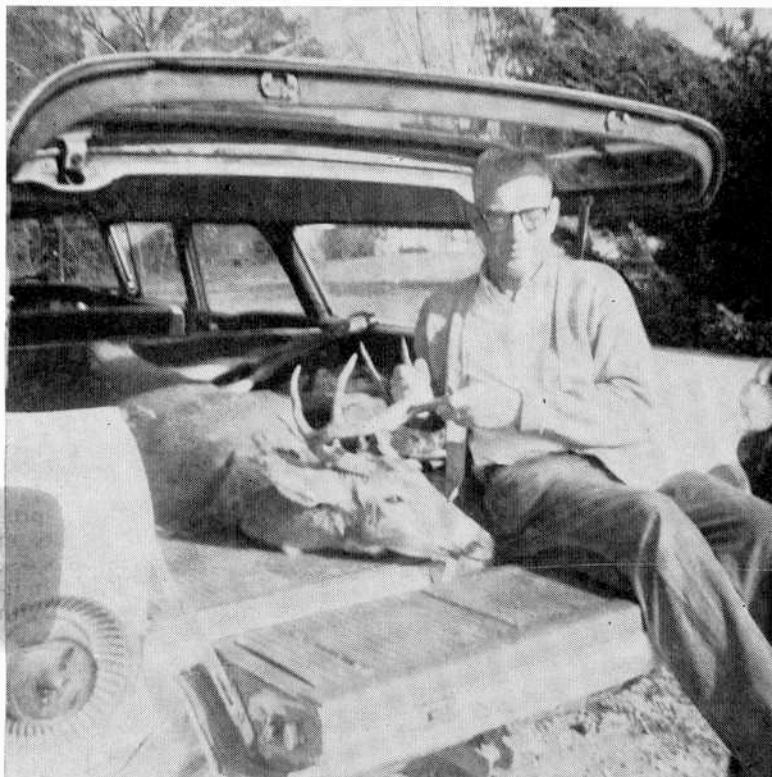
**Ride wanted or will join car pool from Norwood Area, to North Portal, straight day.** J. R. Johns, plant phone 3-5769, home phone Knoxville 689-5639.

**Ride wanted or will join car pool from Fountain City area, Knoxville, to Biology Portal, straight day.** Beverly Silmer, plant phone 3-5046, home phone Knoxville 689-2595.

### MUM'S THE WORD

Not even a team of wild horses could get information out of her, but unfortunately she didn't play bridge with wild horses!





**FRED GUTTERY, CHEMICAL SERVICES**, brought down an eight-point buck back in November at Catoosa. He is seen above with the 177 pound field dressed deer. Fred is having a shoulder-mount trophy prepared at the taxidermist.

## Allstun Fires Hi In January Skeet

The Carbide Skeet Tournament was fired Sunday, January 7, with an even dozen sharpshooters on the line.

Y-12er R. A. Allstun led the pack with a 48.384 handicap score. He was followed by F. S. Patton, 48.068 . . . and W. H. Davy, 47.729.

Ken Bahler, D. Fry and Fred Welfare were firing under penalty due to previous high scoring.

The scoring is always on a handicap basis with 50 shots being fired. In addition to the handicap, a penalty system is included to the advantage of the newcomer.

The next tournament will be held Sunday, February 4, at the Oak Ridge Sportsman's Association range. All Carbide employees are invited to participate. Equipment and instructions are available at the skeet fields.

### January Skeet Scores:

Firer	H'Cap Score
R. A. Allstun, Y-12	48.384
C. Asmanes, Y-12	46.858
K. W. Bahler, Y-12	48.206*
J. C. Barton, ORGDP	45.680
L. M. Bray, Y-12	46.036
W. E. Brundage, ORNL	47.307
W. H. Davy, ORGDP	47.729
D. Fry, ORNL	48.645*
F. S. Patton, Y-12	48.068*
B. Powers, Y-12	42.610
H. P. Prewett, Y-12	47.403
F. G. Welfare, ORNL	47.915*

\*Under penalty.

## Rollers Tops Again On Mixed Alleys

The Rollers assumed the command of the Mixed Bowling League again last week with a two-point share with the Goofers. The Mustangs fell by four to the Roses and Thorns . . . and the McSprays mastered the Hits & Misses for three. Also sharing two it was the Twisters and the Alley Cats.

Bill Hackett, Roses 'N Thorns, rolled high games all the way . . . singles of 210 scratch, 233 handicap . . . series of 557 scratch, 626 handicap.

Gwen McLaughlin, McSprays, rolled a 173 single scratch game . . . while Dessie Worley, Roses 'N Thorns, rolled a 215 handicap single. Virginia Newby, Goofers, posted series of 449 scratch, 587 handicap.

The Rollers rolled the best singles in scratch . . . 624 . . .

## Markers Merge As Classic Alley Top

The Markers merged a one-half point leader in the Classic Bowling League last week after a four-point win over the Smelters. The Pinbusters posted a four-point win over the Screwballs, as did the Eightballs over the Cubs.

Taking three it was the Rebels 'round the Has Beens, the All Stars past the Playboys, the Splinters superior to the Bumpers and the Swingsters towering over the Tigers. The Eagles and Rippers shared two.

Ray Galford, Bumpers, bowled a 224 single scratch game . . . while Max Bezik, Eagles, earned a 260 handicap single. Tom Hilliard, Markers, marked a 578 scratch series . . . while George Bailey, Tigers, tore out a 655 handicap series.

The All Stars aced singles with 914 scratch, 1060 handicap. Series honors were split between the Rebels who rolled 2534 scratch, and the Splinters who put a 2965 handicap score on the totals.

Meanwhile the All Stars and Has Beens arranged to roll off their tie in the first half. The match was set today.

### League standings follow:

Team	W	L
Markers	13½	6½
Rebels	13	7
All Stars	13	7
Rippers	12½	7½
Playboys	12	8
Pinbusters	12	8
Bumpers	11	9
Splinters	11	9
Eightballs	11	9
Eagles	10	10
Swingsters	10	10
Has Beens	9	11
Cubs	7	13
Tigers	6½	13½
Screwballs	4½	15½
Smelters	4	16

while the Alley Cats rolled a 785 handicap single.

The Roses 'N Thorns looked best in series . . . 1817 scratch, 2282 handicap.

### League standings follow:

Team	W	L
Rollers	13	7
Mustangs	12	8
Hits & Misses	12	8
Roses 'N Thorns	11	9
Twisters	10	10
McSprays	10	10
Goofers	6	14
Alley Cats	6	14

Thrifty Americans soon will enter the 27th year of U. S. Savings Bonds with a record high of more than \$50.3 billion in E and H Bonds salted away. The first E Bond was issued May 1, 1941.

## Y-12 Eagles Win Game Number Eight

The K-25 Falcons showed their lethal claws last week to the Y-12 Bat Boys in the opening basketball action. Churchill Moore once again led his teammates in scoring, putting 14 points through the bucket for the winning Falcons.

Hugh Beeson scored 13 of the Bat Boys' 24 points, as the Falcons edged them out 40 to 24.

Y-12's Atoms put the damper on the Sharp Shots in game number two last week as they won handily 40 to 31 . . . despite 19 big points by Don Ramey. Jim Batch led the Atoms with 18, Tim Butler followed with 10.

The flawless Health Physics five climaxed Monday's action with a 72 to 36 win over Combustion.

Bob Compton sank 21 through the goal, Jim Treadwell, 19; and Larry Finch scored 12, as three of the HP boys reached into the double figure column.

Charles Kirkpatrick and Bob Belt scored eight each of the losers.

Y-12's Eagles downed the Radioisotopes Wednesday, 54 to 44, as the game stayed fairly even except for the second quarter when Bill Kirksey broke loose. Kirksey led scoring for the Eagles with 13.

Dave Smiley scored 16 for the losing squad . . . Joe Crunk, 12.

The ORNL Bombers defeated the K-25 Falcons in the closing seconds of the game 42 to 37. A real good contest . . . with newcomer Bill Sharp putting the Bombers into the threatening columns for the second half. Bud Lewis popped 19 through the hoop for the big winners.

The TK's took charge of the Chargers in final play last week, taming them 50 to 34.

Big Doug Raymer muscled his way on both boards while he and Rick Hudson fed the hoop. Raymer's 16 points and Hudson's 14 spelled the big difference.

Larry de Roos scored 10 for the losing Chargers.

### League standings follow:

Team	W	L
Health Physics, ORNL	8	0
Bombers, ORNL	8	0
Eagles, Y-12	8	2
TK's, ORNL	5	2
Chargers, Y-12	5	4
Combustion, ORNL	3	4
K-25 Falcons	3	6
Radioisotopes, ORNL	2	6
Atoms, Y-12	2	5
Sharp Shooters, ORNL	1	7
Bat Boys, Y-12	0	9

## Three Hold Lead In Table Tennis

Geoffrey Newman continues with a tight rein on the X Table Tennis League after a two-game win over Bill Motley. Loyd Wyatt downed Bill Foutz for three . . . and Roy Huddleston hurled over him for two games.

### X League standings:

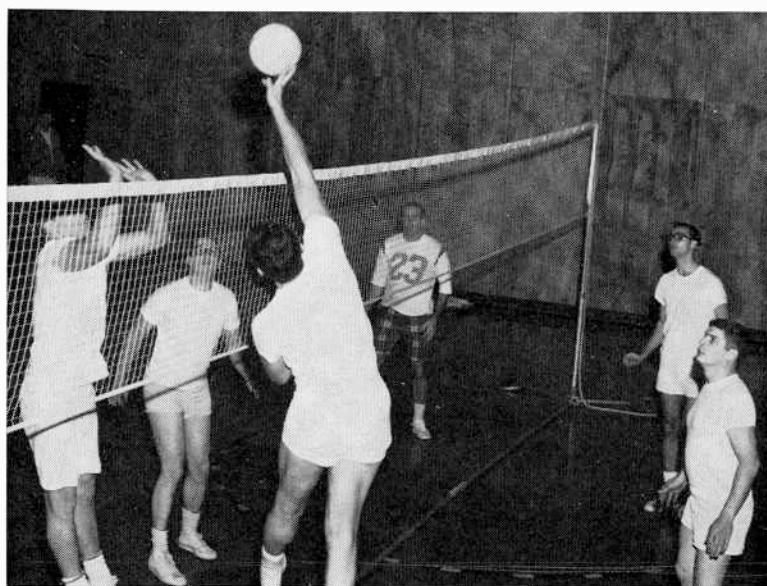
Player	W	L
Geoffrey Newman	20	1
Loyd Wyatt	14	4
Bill Motley	12	9
Herb Mook	8	10
Herve Derrien	7	11
Roy Huddleston	8	13
Bill Foutz	6	15
Jerry Keyes	3	15

In Y action, it was Al Norris over Bob Brown for three . . . and Paul Kasten three games better than Rokuro Oyamada. Francois Kertesz also defeated Oyamada for two.

### Y League standings:

Player	W	L
Gordon Brewer	17	4
Robert Coveyou	16	5
Fred Wetzel	8	7
Art Weinberger	5	4
Al Norris	12	9
Paul Kasten	12	9
Francois Kertesz	7	11
Ed Gambill	4	5
Rokuro Oyamada	6	11
Bob Brown	0	21

Joe Lewin defeated Dave Allen for three in the Z League, as A. B. Meservey also downed Winfred Collins for three. He beat Bill Hackett two games, and picked



IT ISN'T A NEW STEP FROM 'SWAN LAKE' you see above. It's a recent night of action in the Volleyball League. Y-12's big team the Beavers currently ride atop standings in the league.

## Recreation



### Sunday, February 4

**SKEET TOURNAMENT:** 1 p.m. Oak Ridge Sportsman's Association.

### Monday, February 5

**BASKETBALL:** Beginning 6:30 p.m. Oak Ridge High School. Chargers vs. Combustion; Atoms vs. Sharp Shots; Eagles vs. TK's.

**BOWLING:** C League, 5:45 p.m. Ark Lanes.

**TABLE TENNIS:** 7 p.m. Oak Ridge Wildcat's Den.

**PHYSICAL FITNESS:** (For Women): 7:30 p.m. Oak Ridge High School Girls' Gym.

### Tuesday, February 6

**PHYSICAL FITNESS:** 7:30 p.m. Oak Ridge High School Gym.

**BASKETBALL:** Beginning 7 p.m. Atoms vs. Combustion; Health Physics vs. TK's; Radioisotopes vs. Bat Boys (Make-Up games from December 20).

### Wednesday, February 7

**BASKETBALL:** Beginning 6:30 p.m. Oak Ridge High School Gym.

Bat Boys vs. Health Physics; Radioisotopes vs. Bombers; K-25 Falcons vs. Sharp Shots.

**BOWLING:** 8 p.m. Mixed League, Ark Lanes.

### Thursday, February 8

**BOWLING:** Classic League, 5:45 p.m. Ark Lanes.

**BADMINTON:** Informal Play, employees and spouses, 7:30 p.m. Jefferson Junior High School Gyms.

**VOLLEYBALL:** Beginning 6:30 p.m. 6:30 p.m. Court A: Ecobums vs. Old Men; Set Ups vs. Charley Browns; Beavers vs. Neophytes. Court B: Mix Ups vs. Mountaineers; Naughts vs. K-25 Gashouse Gang; K-25 Hawks vs. Dirty Half-Dozen.

### Saturday, February 10

**PARTY TIME:** 7:30 p.m. Green Room, Ridge Recreation Hall. 18 Games \$1.50. Sponsored by E. F. G, H and J Shifts. All Y-12ers welcome!

up three forfeit wins from Jim Hallau.

Hackett defeated Collins for the full three-game count.

### Z League standings:

Player	W	L
Bob Smith	14	1
Joe Lewin	12	3
A. B. Meservey	8	7
Bill Hackett	11	7
Dave Allen	3	9
Jim Hallau	0	6
Tudor Boyd	0	6
Winfred Collins	0	15

What does the figure \$50.3 billion mean to you? It means a brighter future for millions of Americans who own that much in Series E and H Savings Bonds.

## Y-12 Team Holds Volleyball Reins

Volleyball action began last week as the Beavers bested the K-25 Gashouse Gang on Court A 15-2, 15-0, 15-6 and 15-2. The Big Y-12 Team still rides the crest of V'Bers with 31 games under their belt, and only one loss.

The Set-Ups sank the Mountaineers 15-2, 15-2, 15-3 and 15-2. The Ecobums nixed the Naughts 15-8, 15-5, 15-10 and 15-11.

Meanwhile, on Court B the K-25 Hawks handled the Mix-Ups 15-7, 15-9, 15-10 and 15-8. The Old Men downed the Dirty Half Dozen 16-14, 15-8 and 15-7. The Dirty Half Dozen won game three 15-8. The Neophytes defeated the Charley Browns 15-13, 15-8, 15-10 and 16-14.

### League standings follow:

Team	W	L
Beavers, Y-12	31	1
Old Men, ORNL	26	6
Ecobums, ORNL	25	7
Set-Ups, ORNL	24	8
Dirty Half Dozen, ORNL	23	9
K-25 Hawks	17	15
Mountaineers, Y-12	11	21
Naughts, ORNL	10	22
Neophytes, Y-12	9	23
Charley Browns, ORNL	7	25
K-25 Mix Ups	5	27
K-25 Gashouse Gang	4	28

## Rounders Edge Out In C Alley Lead

The Rounders lost the Sunflowers at the top of the heap in C Alley Bowling last week. They took a three-point win from the Big Five, while the Rodders downed the Sunflowers by the same tune.

Other three-point wins went to the Parbusters over the Invalids, the Badgers by the Royal Flush, the Fireballs past the HiLifers and the Rollmasters around the King Pins.

J. F. May, Rodders, rolled a 222 scratch game. Doug Sparks, Invalids, posted a 259 handicap game. Dick Huber, Badgers, put new season highs on the boards in series with 629 scratch, 677 handicap.

The Badgers were best in singles in scratch counting with 930. The Rodders rolled a 1065 handicap single, however. The Badgers returned to the boards with series of 2657, 3050 handicap . . . new highs!

### League standings follow:

Team	W	L
Rounders	10	2
Sunflowers	8	4
Parbusters	8	4
Badgers	7	5
Royal Flush	7	5
Rodders	6	6
Fireballs	6	6
HiLifers	5	7
Big Five	5	7
Rollmasters	5	7
Invalids	4	8
King Pins	1	11

Safety work promotes team work.





**OPEN HEART SURGERY RELIES** on intricate electronic equipment seen in the recording room in the background. The scene is the National Institutes of Health, Bethesda, Maryland. The development to record and monitor electrical signals from the patient's body will be reported in "The 21st Century" Sunday. "Medical Electronics," is the topic of Sunday, February 4's program. The color broadcast, over CBS-TV, is carried locally by WBIR-TV, Channel 10 . . . and starts at 6 p.m. Sunday. It is sponsored by Union Carbide Corporation.

## 'Medical Electronics' To Be Shown Sunday As '21st Century' Looks At The Future

The alliance of electronics, physics and other non-medical sciences to open up new means of diagnosis, treatment and prevention of disease will be reported on the "Medical Electronics" broadcast Sunday on "The 21st Century." The program is set for Sunday, February 4, at 6 p.m. EST, in color on the CBS Television Network, and is carried locally by WBIR-TV, Channel 10. CBS News Correspondent Walter Cronkite is principal reporter for the series, which is sponsored by Union Carbide Corporation.

Doctors who are pioneering in this new field of medicine will demonstrate their teaming with engineers and physicists who have never touched a stethoscope

and can't write a prescription. The new devices they are building will permit more rapid diagnosis of diseases and more effective treatment of patients. The reports will come from the National Institute of Health in Bethesda, Maryland, and from leading medical centers throughout the country.

A medical monitoring chair that can record three different heart measurements, pulse and respiration rates by simply having the patient sit down will be demonstrated by Cronkite at Philco-Ford Company in Palo Alto, California. Widespread application of the chair could enable doctors to spend more time personally diagnosing and treat-

## N. J. Liquid Gas Complex To Be Expanded In '68

More than 300 tons per day of high-purity oxygen and nitrogen capacity will be added to Union Carbide Corporation's Keasbey, N. J., air separation complex, it was announced today. The expansion will include new facilities for liquefying over 200 tons per day of oxygen, nitrogen, and argon. Large liquid storage tanks will be erected, as well as complete facilities for distributing liquid products by truck and rail car. The expansion is scheduled for completion by the end of 1968.

Completed last year, and operated by Union Carbide's Linde Division, the Keasbey plant supplies about a dozen customers with gaseous oxygen and nitrogen by pipelines. This method of

ing patients who are in immediate need.

A hyperbaric chamber will be seen in use at St. Barnabas Hospital in Livingston, New Jersey. The chamber, built by Union Carbide's Linde Division, permits treatment of patients under pressures three times that of the normal atmosphere. The theory is that the pressure will force additional oxygen into every tissue of the patient's body. Since oxygen is good for the patient, more oxygen should improve the recovery of patients in extremely delicate surgery.

Also demonstrated is the technique of cryosurgery, use of intense cold in surgery. In an application of this new concept of surgery a super-cold probe, instead of a knife, is used to freeze diseased tissue. The frozen tissue dies, and when it thaws, the diseased materials are washed away by body fluids.

Other innovations of electronics and physics in medicine that will be demonstrated include "Sim One," a fiber-glass and steel mannequin that can simulate human symptoms and reactions to treatment; fiber optic probes that enable a doctor to see into a diseased organ without making an incision; electronic hospitals where the patient's heart and other body systems are under constant observation; heart and lung machines that can take over for the body while these vital organs are stopped for major surgery.



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supplying several customers with atmospheric gases by pipeline from a plant located centrally to an industrial community was pioneered by the Linde Division several years ago. The Keasbey plant is the seventh such plant in the Linde system.

Goffe Benson, Linde president, reported that anticipated additional requirements for gaseous oxygen and nitrogen from its pipeline customers, plus growing demands for liquid oxygen and nitrogen in the mid-Atlantic states, led to the decision to expand the existing plant's capacity and to add liquid-producing capability.

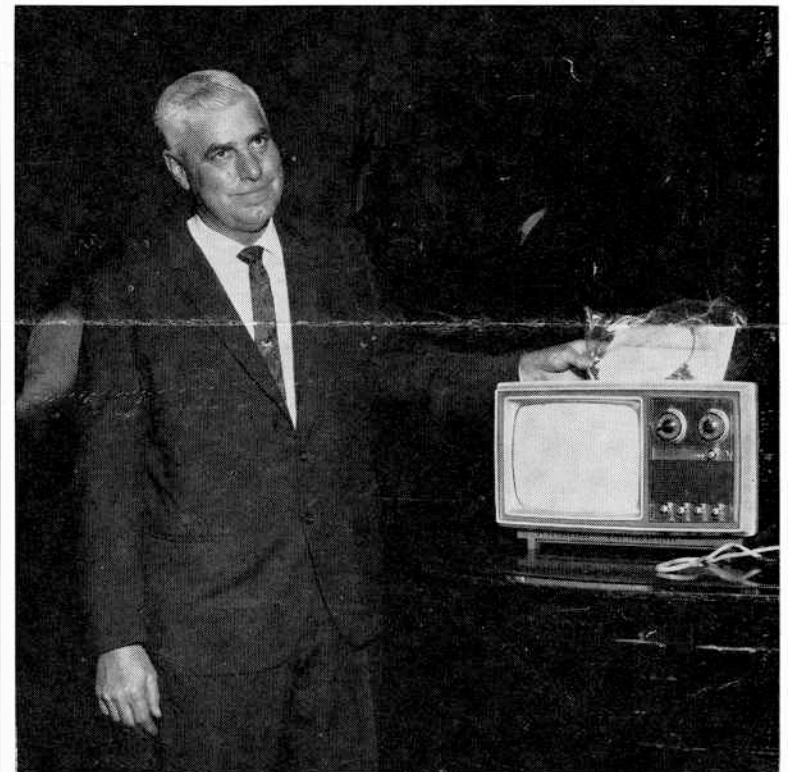
This will be the latest in a

series of new plant construction to increase Union Carbide's liquid oxygen and liquid nitrogen production capacity. New plants in Connecticut, Minnesota, Texas, California, New York, and Indiana were completed in 1967, with additional new plants due on-stream during 1968 in Alabama and Missouri.

### THE LURE THAT LASTS

"Naturally," said the dreamer, "females are more beautiful than males."

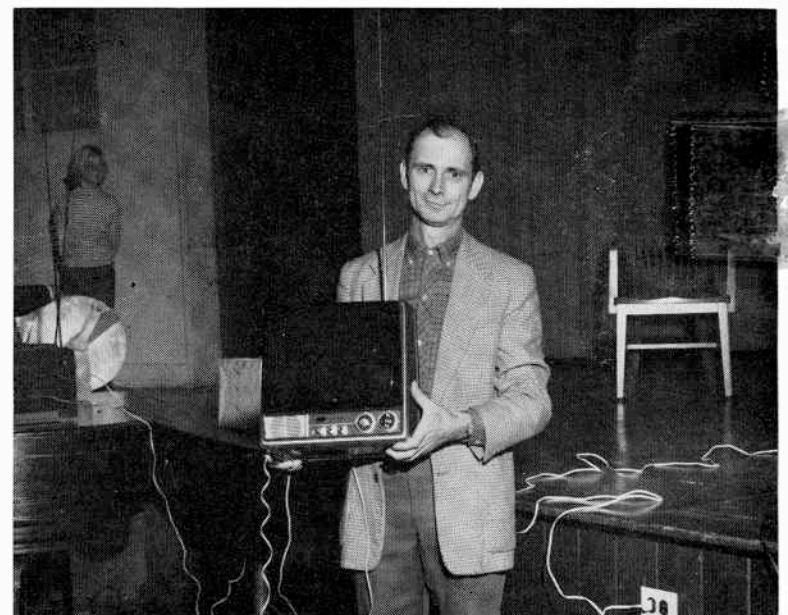
"Artificially," replied the realist, "females are more beautiful than males."



**J. W. EMCH, BUILDINGS, GROUNDS** and Maintenance Shops, is seen above with the beautiful portable color T.V. he won at the annual meeting of Y-12's Credit Union. Emch lives at Powell, and plans to put the set to good use these winter nights.



**Y-12'S CREDIT UNION ELECTED** its new board of directors at its annual meeting January 18 . . . or at least elected three new board members. From left are T. J. Stevens, C. V. Ketron, L. R. Loveless, Lorena Causey, P. L. Patrick, J. F. Morehead and H. C. Orange. Morehead and Orange were elected for three-year terms, and Loveless was named to a one-year term.



**J. O. STEPHENS, CASTING**, won the consolation prize at the Credit Union's annual meeting, held January 18. He won the portable television by drawing . . . as Y-12ers filled the house for their 18th annual meeting. Stephens lives at 121 Nesper Road, Oak Ridge.